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Neotropical Dryopoids. II. Elmoparnus mexicanus, sp. n. (Coleoptera, Dryopidae).

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Introduction

The genus *Elmoparnus* is among the least known of the family Dryopidae. In his synopsis of the genus, Hinton (1940) listed only two species, E. brevicornis Sharp (1882), known from but two specimens collected in Panama, and E. glaber Grouvelle (1889), known from a few specimens taken in Venezuela. This paper describes a third species based upon a single female specimen taken in southeastern Mexico. Other beetles collected at the same time from the same small mountain torrent include representatives of the dryopoid genera Psephenus, Helichus, Limnichus (?), Phanocerus, Elsianus, Austrolimnius, Cylloepus, Heterelmis, Microcylloepus and Neoelmis, as well as curculionids and larval ptilodactylids. Unfortunately, I made no record of the precise microhabitat or behavior of this specimen, noting only that the stream was somewhat polluted. I did not record the nature of the pollutant, but suspect that the stream contained obvious evidence of manure from domestic animals. It is to be hoped that future records of the genus will include information concerning its biology, as nothing has been published concerning this. Extrapolating from knowledge concerning other members of the family, I surmise that the larvae may be soil-dwellers, the adults being either riparian or aquatic. Anatomically, Elmoparnus seems most closely related to Dryops. If this similarity extends to ecology, Elmoparnus might well be sought on the moist bases of rocks along streams and in debris which is caught on objects protruding from the surfaces of fast-flowing streams. It is also likely that adults may be attracted to lights, since such relatives as Dryops and Pelonomus are so readily collected at lights.

Elmoparnus mexicanus sp. n.

(Figs. 1-3)

Female holotype: Length 5.6 mm, width 2.8 mm. Obovate, moderately strongly convex. Cuticle shiny, black to dark rufo-piceous; tibiae paler reddish brown; antennae and tarsi rufo-testaceous. Pronotum and elytra essentially glabrous.

Head 1.2 mm wide across eyes; clothed with dense, golden pubescence. Medial portion of frons slightly depressed. On each side with a feebly elevated, bilobate ridge extending transversely from median depression to eye. Antennae 9-segmented, the first two segments with prominent golden hairs, the remaining seven with dense, fine pubescence. Clypeus with anterior margin broadly arcuate, anterior angles rounded; sides and basal three-quarters densely covered with prominent golden hairs, but apical quarter glabrous, translucent reddish brown. Labrum with middle of anterior margin conspicuously emarginate; anterior angles broadly rounded; on each side with long, erect, golden hairs; anterior margin with a dense row of short hairs; with a glabrous area occupying middle one-third just behind anterior margin.



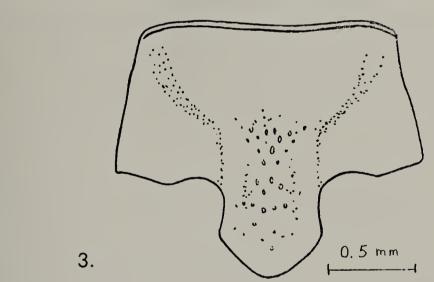


Fig.1. Elmoparnus mexicanus sp. n., dorsal aspect of female. Length 5.6 mm.

Fig. 2. Elmoparnus mexicanus sp. n., ventral aspect of female.

Fig. 3. Elmoparnus mexicanus sp. n., prosternum, ventral aspect.

Pronotum 1.4 mm long, 2.3 mm wide at base, and 1.5 mm wide at apex. Sides slightly arcuate, feebly sinuate before apical angles, which are produced and deflexed. Lateral edges narrowly margined. Sublateral carinae low but distinct, the inner sides sharp; extending from base nearly to apex; feebly and rather evenly diverging so that at apex they are only about one-third as far from lateral margins as at base. Surface smooth and polished, evenly convex; disk with punctures distinctly smaller than facets of eyes and usually separated by two to four diameters; toward base and sides punctures become finer and sparser.

Scutellum relatively flat, subtriangular with rounded sides, 0.25 mm long and 0.35 mm wide; surface smooth and punctate like adjacent parts of pronotum.

Elytra 4.0 mm long, 2.4 mm across humeri, and 2.8 mm wide at broadest point, which is

near basal one-third. Humeral angles slightly produced anteriorly. Lateral margins feebly and narrowly explanate, interrupted at apical fourth by a densely pubescent depression. Surface smooth and polished, rather evenly convex; without striae; punctation very much like that of pronotum.

Prosternum 1.4 mm long, the prosternal process 0.6 mm long and 0.6 mm wide; at about anterior two-fifths deflexed and laterally expanded to accommodate withdrawn head. Median portion shallowly depressed posterior to deflexed region. Prosternal process widest just posterior to coxae, narrowing gradually rather than abruptly, and without a median projection externally visible (Fig. 3). Surface rather similar to that of pronotum, but with punctures more crowded in region near deflexion. Metasternal disk with surface also similar to pronotum; median longitudinal line very fine and feebly impressed, obsolete in anterior fourth.

Abdomen with first sternite feebly rugose near lateral margins. All portions of sternites tomentose to densely pubescent except medial portion of first sternite, which is sparsely pubescent, and apical five-sixths of median third of last sternite, which is sparsely pubescent to almost glabrous. Apical margin of last sternite with a slight median notch.

Type: A unique female in the Stovall Museum of Science and History, Norman, Oklahoma. MEXICO: North of Rayon in the state of Chiapas, on December 6, 1966, from a small cataract at an elevation of about 4,000 feet.

Comparative notes.—This is the largest species yet described, being 5.6 mm long as compared with E. glaber which is 5.0 mm and E. brevicornis which is only about 2.5-3.0 mm. It resembles E. brevicornis in having 9-segmented antennae, whereas those of E. glaber are 10-segmented. The anterior margin of the clypeus resembles that of E. glaber, differing from that of E. brevicornis in that it is not deeply and broadly sinuate on each side. The sublateral pronotal carinae also resemble those of E. glaber in being nearly complete, in contrast with those of E. brevicornis which are confined to about basal two-fifths. E. mexicanus sp. n. differs from both of the other species in lacking a slender protuberance extending from the apex of the prosternal process.

Key to the Species of Elmoparnus

- - Antennae with 9 segments; middle region of first abdominal sternite not rugose; prosternal process (Fig. 3) without slender apical protuberance—(MEXICO) _______E. mexicanus sp. n.

ACKNOWLEDGEMENT

Figs. 1 and 2 are from paintings made by Ramona Kaatz, who is now Mrs. Carlos Garcia.

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Descriptors: Coleoptera; Dryopoidea; Dryopidae; Elmoparnus; new species; description; key; Neotropical; Mexico.

ABSTRACT—BROWN, HARLEY P. (Zool. Dept., Univ. Okla., 730 Van Vleet Oval, Norman, Oklahoma 73069, U.S.A.). Neotropical Dryopoids. II. Elmoparnus mexicanus, sp. n. (Coleoptera, Dryopidae). Coleop. Bull. A new species based upon a single female specimen is described from a small mountain stream near Rayon, Chiapas, Mexico. The holotype is in the Stovall Museum of Science and History at the University of Oklahoma, Norman. Dorsal and ventral aspects of the specimen are figured, and a key separating the three known species of Elmoparnus is presented. E. mexicanus sp. n. differs from the other species in being larger, in lacking a narrow extension at the apex of the prosternal process, and in other details.—Author.

BOOK NOTICE

In 1969, Carl H. Lindroth published Part 6 of the Ground-Beetles of Canada and Alaska. With this volume the descriptive part of the series is concluded. Included are the tribes Chlaeniini, Lebiini, and related ones. Part 1 which will contain an introduction and keys to the genera is yet to appear.

Part 6, as are the other volumes, is available from the Entomological Society of Lund, Zoological Institute, University of Lund, Lund, Sweden. The price of this part is 50 Swedish crowns which at the current rate of exchange is \$9.66.

N.M.D.